

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in this application.

1 to 8 (Cancelled).

9. (Currently amended) A method for repairing a nuclear fuel assembly, comprising:

first providing a repair sleeve, the repair sleeve having a shaft with a first end, a second end, and a diameter, the diameter configured to fit into a guide thimble in a guide thimble opening of a top nozzle of the fuel assembly, the guide thimble connected to the top nozzle, wherein the diameter of the shaft is dimensioned such that an exterior of the shaft fits into the guide thimble in the guide thimble opening, wherein the shaft has at least two openings, each opening having a first closed end, oriented towards the shaft first end, and a second closed end, oriented towards the shaft second end, and a tendon connecting the first closed end and the second closed end of each opening, such that the tendon bridges the first and second closed ends of each opening, dividing each opening into two portions, the tendons configured to deflect in an instance of a horizontal load on the tendon during insertion, each of the tendons having at least one projection configured to be inserted into a dimple of a guide thimble sleeve, and the repair sleeve having a lapped edge for installation on the top of the top nozzle of the nuclear fuel assembly; and

then inserting the second end of the shaft of the provided repair sleeve into the guide thimble in the guide thimble opening in the top nozzle of the nuclear fuel assembly, the guide thimble connected to the top nozzle, such that the second ends of the tendons, the projections of the tendons, and the second ends of the openings are inserted into the guide thimble before the first ends of the tendons and the first ends of the openings are inserted into the guide thimble, and the projections of the tendons project into the dimples of the guide thimble sleeve; and

inserting a thimble insert assembly into an interior of the provided repair sleeve.

10. (Original) The method according to claim 9, wherein the step of inserting the thimble insert assembly into the interior of the repair sleeve prevents further deflection of the repair sleeve in a horizontal direction.

11. (Previously presented) The method according to claim 9, wherein the shaft has two openings and two tendons extending through the openings, each of the tendons having one projection.

12. (Previously presented) The method according to claim 10, wherein the shaft has two openings and two tendons extending through the openings, each of the tendons having one projection.

13. (Previously presented) The method according to claim 9, wherein the at least one projection is configured in a trapezoidal shape or a hemispherical shape.

14. (Previously presented) The method according to claim 13, wherein the at least one projection is configured in a trapezoidal shape.

15. (Withdrawn) The method according to claim 13, wherein the at least one projection is configured in a hemispherical shape.

16. (Previously presented) The method according to claim 10, wherein the at least one projection is configured in a trapezoidal shape or a hemispherical shape.

17. (Previously presented) The method according to claim 16, wherein the at least one projection is configured in a trapezoidal shape.

18. (Withdrawn) The method according to claim 16, wherein the at least one projection is configured in a hemispherical shape.

19. (Previously presented) The method according to claim 11, wherein the projection is configured in a trapezoidal shape or a hemispherical shape.

20. (Previously presented) The method according to claim 19, wherein the at least one projection is configured in a trapezoidal shape.

21. (Withdrawn) The method according to claim 19, wherein the at least one projection is configured in a hemispherical shape.